## STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

DIVISION OF MINING, LAND AND WATER

TONY KNOWLES, GOVERNOR

3601 C STREET, SUITE 800 Anchorage AK 99503-5935 PHONE: (907) 269-8650 FAX: (907) 563-1853

EMAIL: bruceb@dnr.state.ak.us

Anvil (1. **INSPECTION REPOR** SPECIMEN GULCH F996842 August 23 and August 25, 1999 Alaska Gold Company; Betty Krutzsch Alaska Dept. of Fish & Galam

**Inspection Date:** Owner:

Operator:

Betty and Augie Krutzsch

Habitat - Region III AGO W

Agency Personnel:

Ryan Hull, Bruce Novinska, and Bruce Buzby

ATS

Weather Conditions:

clear and sunny temperature 60°

Photos:

p0001247-p0001269, p0001358-p0001364

**GPS Files:** 

R082601a, R082603a, R082604a, and R082604b

**Inspection Objectives:** 

Follow up inspection and to map footprint of the operation.

Robert McLean and Nancy Ihlenfeldt from the Dept. of Fish and Game accompanied the inspectors.

## MINING

When we arrived on August 23 the backhoe was down for repairs and mining activity had ceased for the day. When we returned on August 25 mining activity was being conducted in the 1999 cut. The pay pile was being washed, and washed rock was being hauled and used to armor the stream banks. During this inspection the area of disturbance was measured and determined to be 29.7 acres. A map showing the disturbed and reclaimed acres has been included in this report (see diagram 1).

## RECLAMATION

Some reclamation has been done on the 1998 pit. The overburden piles have been rounded but more work would be required in order to consider this reclaimed (see Figure 1).

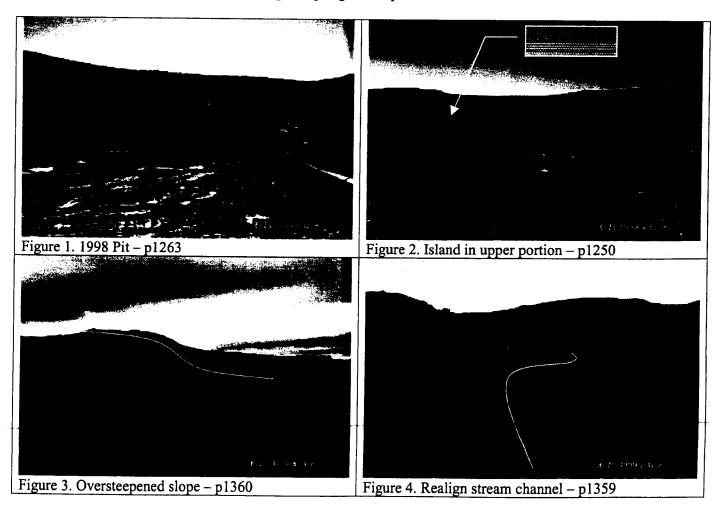
During this inspection we noted a significant amount of the disturbance ion the right limit and upper portion of the disturbance is in a stable configuration. There are three things that need to be addressed before we can release the area shown on Diagram 1. First in the upper portion above where the stream starts, there is an island of overburden that needs to be pushed over to the right limit and a stable slope established (see Figure 2). Second there is an oversteepened slope on the right limit in the upper portion of disturbance that needs to be recontoured (see Figure 3). Finally in the upper portion, the stream channel needs to be realigned so that it will not cut into the bank on the right limit (see Figure 4). Once these

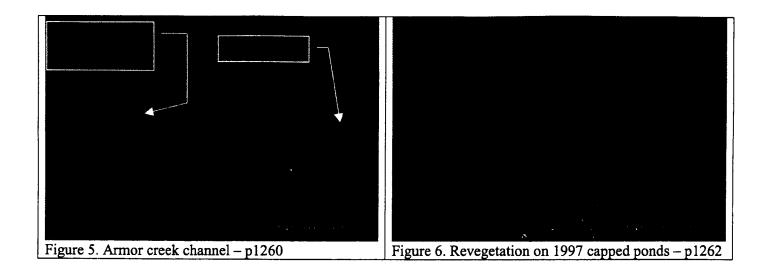
measures are taken and we receive photographs and documentation that these areas were reclaimed we can release 12.5 acres.

Placing rip rap along the stream channel is critical to the long-term stability if the stream channel. This is especially true in the area between the 1997 capped sediment ponds and 1999 dam (see Figure 5).

There has been a tremendous effort to revegetate the disturbed areas that have been regraded. Walking from the lower capped ponds to the top of the disturbance we noted grasses and clover. Along the banks of the creek and the upper slopes willows have been planted. The survival rate is estimated and around 20 percent. Bruce Novinska demonstrated willow staking techniques that should improve the survivability of the willow staking. I have also included in this report several pages on willow planting from the "Streambank Revegetation Project" by Gay A. Muhlberg and Nancy Moore. The 1997 capped ponds are holding up well and revegetating nicely (see Figure 6). We will release a portion of the bond on these ponds but maintain a thirty-foot buffer zone along the edge of the stream.

Finally all springs must be tied into the stream channel and not directed through the settling ponds to help prevent the ponds from failing during the spring breakup.





cc: Ryan Hull, Division of Mining, Land and Water
Rep. Richard Foster
Scott Miller, Alaska Gold Company
Mac McLean, Alaska Dept. of Fish & Game
Cindi Godsey, EPA

Michael Yanez, City of Nome

Don Rice, U.S. Army Corps of Engineers

Joran Freeman, Office of Environmental Health, Nome

